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The Secretary
Federal Communications Commission
1919 M. Street N.W. Room 222
Washington, DC 20554

In the Matter of)	ET-Docket No. 93-62/
)	and in this docket pertaining to:
Guidelines for Evaluating the Environmental)	- Report and Order FCC 96-326
Effects of Radiofrequency Radiation)	- First Memorandum of Understanding
		Order FCC 96-487

**Ex Parte Comments Pertaining to ET-Docket 93-62 Regarding
PETITIONS FOR RECONSIDERATION of Commission Rule & Order FCC 96-326,
and First Memorandum of Opinion and Order FCC 96-487**

with original and 1 copy submitted to the Secretary of the Commission
in accordance with 47 CFR Sections 1.1200 to 1.1216
9th Ex Parte Submission

Dear Mr. Secretary,

Enclosed please find an original and 1 copy of a written ex parte submission pertaining to ET-Docket 93-62. Please assure these are put in the official record of this proceeding. The purpose of this submission is primarily to note manuscript corrections to the 8th ex parte submission of the Ad-hoc Association of Parties Concerned About the Federal Communications Commission's Radiofrequency Health and Safety Rules ("Ad-Hoc Association") regarding Ad-Hoc Association petitions for reconsideration of FCC 96-326 and FCC 96-487.

Thank you,



David Fichtenberg
Spokesperson for the Ad-hoc Association of Parties Concerned About the Federal
Communications Commission's Radiofrequency Health and Safety Rules
PO Box 7577
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dated August 25, 1997

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I hereby certify copies have been delivered or sent by first -class-mail, postage pre-paid on August 25, 1997 to:

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Federal Communications Commission
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Washington, D.C. 20554

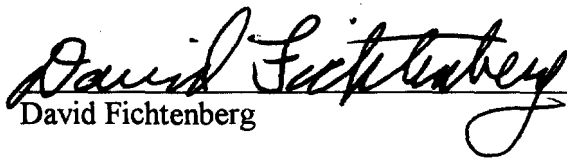
Commissioner James H. Quello
Federal Communications Commission
1919 M Street N.W. Room 802
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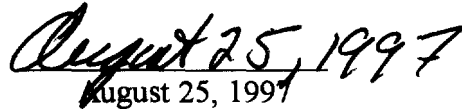
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Federal Communications Commission
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David Fichtenberg


August 25, 1997

Before the
FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

In the Matter of)	ET-Docket No. 93-62
)	and in this docket pertaining to:
Guidelines for Evaluating the Environmental)	- Report and Order FCC 96-326
Effects of Radiofrequency Radiation)	- First Memorandum Opinion and
		Order FCC 96-487

To: The Commission

Ex parte Comments Pertaining to ET-Docket 93-62

Regarding

PETITIONS FOR RECONSIDERATION of Commission Rule & Order FCC 96-326,
and First Memorandum of Opinion and Order FCC 96-487

with original and 1 copy submitted to the Secretary of the Commission
in accordance with ex parte submission rules in 47 CFR Section 1.1200 to 1.1216

Submitted by the Ad-hoc Association of Parties Concerned About the Federal
Communications Commission's Radiofrequency Health and Safety Rules, PO Box 7577,
Olympia, WA 98507-7577

9th Ex parte Submission

Dated August 25, 1997

1. Introduction:

1.1 Appropriate submission of an ex parte presentation

The Ad-hoc Association of Parties Concerned About the Federal Communications
Commission's Radiofrequency ("RF") Health and Safety Rules ("the Ad-Hoc
Association") understands

(i) that a Federal Communications Commission ("Commission") "Sunshine Agenda"
period per 47 CFR Section 1.1202(f) and Section 1.1203 is not now in effect regarding
ET-Docket 93-62;

(ii) that administrative finality has not yet been decided upon concerning the Commission's responses to Petitions For Reconsideration that have been submitted in this proceeding; and that

(iii) this proceeding permits ex parte presentations in accordance with 47 CFR § 1.1200 to 1.1216, and in accordance with the April 8, 1993 Notice of Proposed Rule Making in ET-Docket 93-62, paragraph 30.

Accordingly, the Ad-Hoc Association is properly making this ex parte submission.

1.2 The purpose of this submission is to make some manuscript corrections to the 8th ex parte submission of the Ad-Hoc Association, dated August 21, 1997 and faxed to the Chairman of the Commission on August 22, 1997 and mailed to the Secretary of the Commission and to parties listed therein also on August 22, 1997. In order to make a timely submission to the office of the Chairman of the Commission on August 22, 1997, it appears that some manuscript errors were not detected, and are corrected herein.

2. The corrections that should be made to the 8th ex parte submission dated August 21, 1997 are:

2.1. Summary page ii, 5th line from bottom, 'rerquired' should be 'required'

2.2. Summary, page iii

8th line from top, 'criter' should be 'criteria'

12th line from top, 'builidings' should be 'buildings'

2.3. Pleading, page 3,

6th line from bottom, 'rerquired' should be 'required'

5th line from bottom, 'locallized' should be 'localized'

2.4. Pleading, page 4

2nd line from top, 'advesed' should be 'adverse'

8th line from top, '15' should be '6'

9th line from top 'GHz' should be 'minutes'

2.5. Pleading, page 4,

19th line from top, 'criter' should be 'criteria'

20th line from top, 'Aslo' should be 'Also'

2.6. Pleading, page 5

5th line from top, 'compliance' should be 'compliance' and 'critieria' should be 'criteria'

13th line from top 'builidings' should be 'buildings'

16th line from top, 'specifiying' should be 'specifying'

17th line from top, 'geograhic' should be 'geographic'

24th line from top, 'recieving' should be 'receiving'

2.7. Pleading, page 6

5th line from top, 'fy' should be 'by'

15th line from top, 'wll' should be 'will'

21st line from top, 'chidren' should be 'children'

2.8. Pleading, page 7

1st line from top, 'informaiton' should be 'information'

2nd line from top, 'pattrerns' should be 'patterns'

5th line from top, 'scientifc' should be 'scientific'

18th line from top, 'fucntions' should be 'functions'

2.9. Pleading page 8, 13th line from top, 'met.as' should be 'met, as'

2.10. Pleading page 9, 'medula' should be 'medulla'

2.11. Pleading, page 10, 12th line from the top, 'stuidy' should be 'study'

2.12. Pleading, page 15, 8 lines from bottom, 'differenentiate' should be 'differentiate'

2.13. Pleading page 19, 3rd line from top, 'medula' should be 'medulla'

2.14. Pleading, page 22, 5th line from bottom, 'Justeson' should be 'Justesen'

2.15. Pleading, page 31, 11th line from bottom, 'Stenick' should be 'Steneck'

2.16. Pleading, page 38, lines 8 through 17, Conclusion, should be rephrased and emphasize additional points as given below:

"Conclusion: Therefore the above considerations support the Ad-Hoc Association claims that

(i) the Commission cannot justifiably state that the Commission believes that "the regulations that we are adopting herein represent the best scientific thought and are sufficient to protect the public health," [R&O, para. 168]

(ii) studies have observed disruption of learned behavior or learning of new behavior at exposures 15% of the Commission's hazard threshold, justifying more stringent limits.

(iii) frequency and modulation specific effects demonstrate that there could be unknown effects peculiar to the new digital wireless signal patterns. Please note, that while there is strong evidence that there are frequency specific effects, when evidence is found of adverse effects at other than wireless frequency transmission signal patterns, caution and prudence requires that these effects should be presumed to occur for any Commission licensed facility signal pattern until "appropriate experimentation and inference" show otherwise. [NCRP Report #86, 1986, section 17.2.2.3].

2.17. Pleading, page 39, lines 1 through 5 should be omitted, and line 8, beginning with "Exhibits that were not numbered Exxx when submitted" should be omitted. These lines do not add information and may confuse.

2.18. Pleading, page 40, between the 6th and 5th line from the bottom, e.g. before the line describing documents included with the ex parte submission dated July 7, 1997, should be inserted:

"Documentation included with: "Opposition to parts of Petition For Reconsideration of the Department of Defense, US West, and AT&T Wireless:

o Analysis of Partial Body Method and Why It Should Be Rejected by David Fichtenberg

o Letter ballot of M.Swicord and M. Altman regarding vote on IEEE C95.1-1991, April 1991, and list of persons voting, their vote, and organization affiliation.

o American National Standard Z136.1-1986, page 28, American National Standard Z136.1-1993, page 31

o Letter from Norbert Hankin of the U.S Environmental Protection Agency, Office of Radiation and Indoor Air, dated October 8, 1997, to David Fichtenberg, regarding the EPA Administrator's statement that the Commission's standard addressed EPA concerns about "adequate protection of public health," and Mr. Hankin noted that this was meant to refer only to protection from the thermal effects of body overheating.

2.19 Pleading, page 41, 6th line from bottom, 'E204' should be

'**E204**: documentation of telecommunications facility on rooftop in E194, which was at sufficiently low height that homes nearby on a hill were at the same height as the transmitter, discussed at page 20, herein.

E205: Letter from Mary D. Nichols, U.S. Environmental Protection Agency ("EPA"), Assistant Administrator for Air and Radiation, dated January 17, 1997 to Federal Communications Chairman Reed E. Hundt. This letter was discussed extensively in the ex parte submission dated June 10, 1997, at pages 8 through 19. The discussion showed that M. Nichols clarified that, "*N.Hankin's 'response has been incorrectly construed as a departure from the Administrator's position in July [1996].*" Accordingly, it has been clarified for the Commission by M. Nichols that when N.Hankin stated, "The statement referring to 'adequate protection' pertains to thermally related effects," that he was correctly construing the position of the EPA Administrator. Hence, when M. Nichols reiterates EPA's support of the Commission's rules in the R&O, "as providing adequate protection of public health," she must necessarily mean for protection from "thermally related effects" as described by N.Hankin, whose comments M. Nichols implied were correct, and were "incorrectly construed."

The Ad-Hoc Association Petition was submitted because the Ad-Hoc Association believes that the EPA has overlooked or misunderstood important information in the record, and thus it is believed gave inappropriate responses to the Commission, and also that new information was not considered when the EPA gave its comments in November, 1993, in July 1996, and in January 1997 to the Commission. The Ad-Hoc Association also believes that the EPA Administrator and M. Nichols may have overlooked or misunderstood information in the record, or be unaware of new information when their letters of July 1996 and January 1997 were prepared. While the Ad-Hoc Association agrees that the Commission should not set limits to be less stringent than that which has already been recommended by the federal health agencies with RF bioeffects expertise, it is believed that limits need to be more stringent and that the Commission should ask these federal health agencies to review the material presented for reconsideration.

Moreover, as noted in the ex parte submissions by the Ad-Hoc Association during June-August 1997, that additional new information which became known since January 1997 provides additional support to doubt the adequacy of the Commission's rules to protect from all mechanisms of RF interaction the health of the public and workers. Such important information since January 1997 includes:

2.19.1. At a February 7, 1997 FDA workshop a report indicated evidence supports increase in free radicals at 1.2 W/kg (see item 2.1 in ex parte 3 at pages 3 to 6) applicable to brain nerve cells[note: 10th line from top on page 4 of ex parte 3 should be changed from "0.6 W/kg" to "1.2 W/kg" and then is correct and consistent with what is reported in the rest of item 2.1.]. Since 1.2 W/kg is below the 'safe' limit for exposure to cellular phone signals of the Commission, 1.6 W/kg, this raises further doubts of the safety of the Commission's limits. Also see details of the above included with the ex parte submission dated July 7, 1997 the pre-publication copy of the paper by H.Lai and N.Singh, "Melatonin and a Spin-Trap Compound Block Radiofrequency Electromagnetic

Radiation-Induced DNA Breaks in Rat Brain Cells," Bioelectromagnetics, in press as of May 1997.

2.19.2. At same FDA workshop, at 1.6 W/kg an increase was noted in the rate of cell proliferation of human cancer glioblastoma cells, supporting evidence that exposure at such levels can result in acceleration of brain tumor growth. This was noted in the presentation of Ewa Czerska of the Food and Drug Administration, see item 2.20 below, see E169, and see discussion in ex parte 3 on this matter. The Commission presently considers 1.6 W/kg safe. Hence, this new study showing this exposure level significantly increases proliferation of human cancer brain tissue tumors, adds further weight that the Commission's limits are too high and do not take into account the most recent scientific experiments, and best scientific thought for applying public policy decision making when there is not a sufficient replication of experimental findings as some might wish when establishing what should be found scientific fact vs. what should be considered for policy making, when there remains yet some uncertainty of scientific facts and when and how they may apply.

2.19.3. At 0.021 mW/kg (0.000021 W/kg) it was reported at the June 1997 meeting of the Second World Congress for Electricity and Magnetism in Biology and Medicine, held June 8-13, 1997 in Bologna, Italy, that at 960 MHz and with a transmission pattern simulating the European Global System for Mobile communications (GSM) that changes occurred in the rate of human skin cell proliferation. See E168 for details. E168 is also the reference for statements made in item 31.4 at page 82, 83 of ex parte 2, and at the time was not referenced in that section.

2.20. Pleading, footnotes: page 51, 3rd line from bottom, "E169: E. Czerska," should be: **E169:** Ewa M. Czerska et al., Center For Device and Radiological Health, Food and Drug Administration("FDA"), Rockville, Maryland, "Effects of Radiofrequency Electromagnetic Radiation On Cell Proliferation," Abstract regarding a presentation at an FDA Workshop held in Rockville, Maryland, February 7, 1997, and showing that at 827 MHz and at 1.6

W/kg and at 4.767 W/kg, that RF signals identical to that of some digital cellular phones found *"statistically significant increases in cell proliferation at both exposure levels."*

Since the public may be exposed to levels as high as 1.6 W/kg, and workers to levels of 8 W/kg, it follows that the increased proliferation of human glioblastoma cancer cells at 1.6 W/kg is reasonable evidence of an adverse affect, and further justifies more stringent limits as requested by the Ad-Hoc Association.

2.21 Insufficient rationale for exposing workers at 5 fold higher exposure levels unless the Occupational Health and Safety Administration ("OSHA") letter directive to the Commission of March 1994 in this proceeding is followed, i.e. OSHA stated,

"Persons exposed above the [general public/uncontrolled] uncontrolled environment criteria would be protected by a program designed to mitigate any potential increase in risk." [Letter from Stephen Mallinger, Acting Director, Directorate of Technical Support, March 1, 1994, to Mr. Thomas P. Stanley, Chief Engineer, Office of Engineering and Technology, Federal Communications Commission, per ET Docket 93-92]

For if there is not such mitigation, then there is an insufficient rationale for exposing workers to 5 fold higher exposure levels. This is because the 1986 RF NCRP 1986 limits from which the Commission states it derives its limits, provides a fifth of the exposure for the general public as allowed for workers is given in NCRP as follows:

"The rationale for the reduction by a factor of 5 is based upon the exposure periods of the two populations, rounded off to one digit (40 hours per week / 168 hours per week= ~ 0.2)." [NCRP 1986, section 17.4.2] However, this rationale seems weak since workers also return to their residence where they may be exposed an additional 16 hours a day. Thus, workers, may be exposed 24 hours a day, 8 of which are at 5 times the level as not-exposed workers.

Moreover, the RF NCRP 1986 rationale for its more stringent limits for the general population considers that,

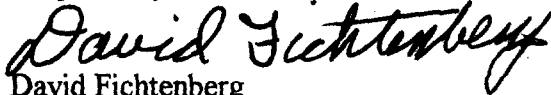
"the population at large, some members of which could be exposed continuously to RFEM fields, contains subpopulations of debilitated or otherwise potentially vulnerable individuals for whom there is presently inadequate knowledge to set firm standards. For example, the sensitivity of aged individuals, of pregnant females and their concept, of young infants, or of chronically ill persons is not known." [NCRP report #86, 1986, section 17.4.2].

However, the above rationale was given in this 1986 standard, and now, 11 years later, advances in medical treatment are permitting more persons, such as communications workers, with chronic disease to continue to extend their participation in the workforce. Moreover, there is a growing trend for women to participate in jobs that were previously almost exclusively associated with men, including jobs in the wireless telecommunications industry; thus, exposures must provide for exposing pregnant women - unless the Commission will explicitly preclude this option, but such act may be contrary to the Americans with Disabilities Act (ADA). Moreover, such pregnant women may have residences near fixed base station transmitters, and so be exposed 24 hours a day, with 8 hours being up to 5 fold higher exposures than the 16 hours of exposure in their homes.

Therefore, it would seem that based upon the rationale of the NCRP Report #86, 1986, from which the Commission derives its exposure limits from fixed base station transmitters, that given the increasing number of persons with chronic disease still able to work, and the increasing number of women, including pregnant women in jobs where men had been predominantly employed, that the limits appropriate for the general population/uncontrolled are also appropriate for the occupational/controlled group. The only circumstance when this would not occur is if the level of control 'fully aware' workers could exercise was such that the OSHA RF health and safety program elements were included in the elements the OSHA said the Commission should require, and these elements had the effect so that:

"Persons exposed above the [general public/uncontrolled] uncontrolled environment criteria would be protected by a program designed to mitigate any potential increase in risk." [See OSHA letter reference above in this section]

Respectfully submitted,



David Fichtenberg

Dated: August 25, 1997

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